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(54) Title: **NITRIC OXIDE DONORS FOR INDUCING NEUROGENESIS**

(57) Abstract: There is provided a method of promoting neurogenesis by administering a therapeutic amount of a nitric oxide donor compound to a patient in need of neurogenesis promotion. Also provided is a compound for providing neurogenesis having an effective amount of a nitric oxide donor sufficient to promote neurogenesis. A nitric oxide compound for promoting neurogenesis is also provided. Further, a method of augmenting the production of brain cells and facilitating cellular structural and receptor changes by administering an effective amount of a nitric oxide donor compound to a site in need of augmentation is provided. There is provided a method of increasing both neurological and cognitive function by administering an effective amount of a nitric oxide donor compound to a patient.

**WO 00/76318 A1**

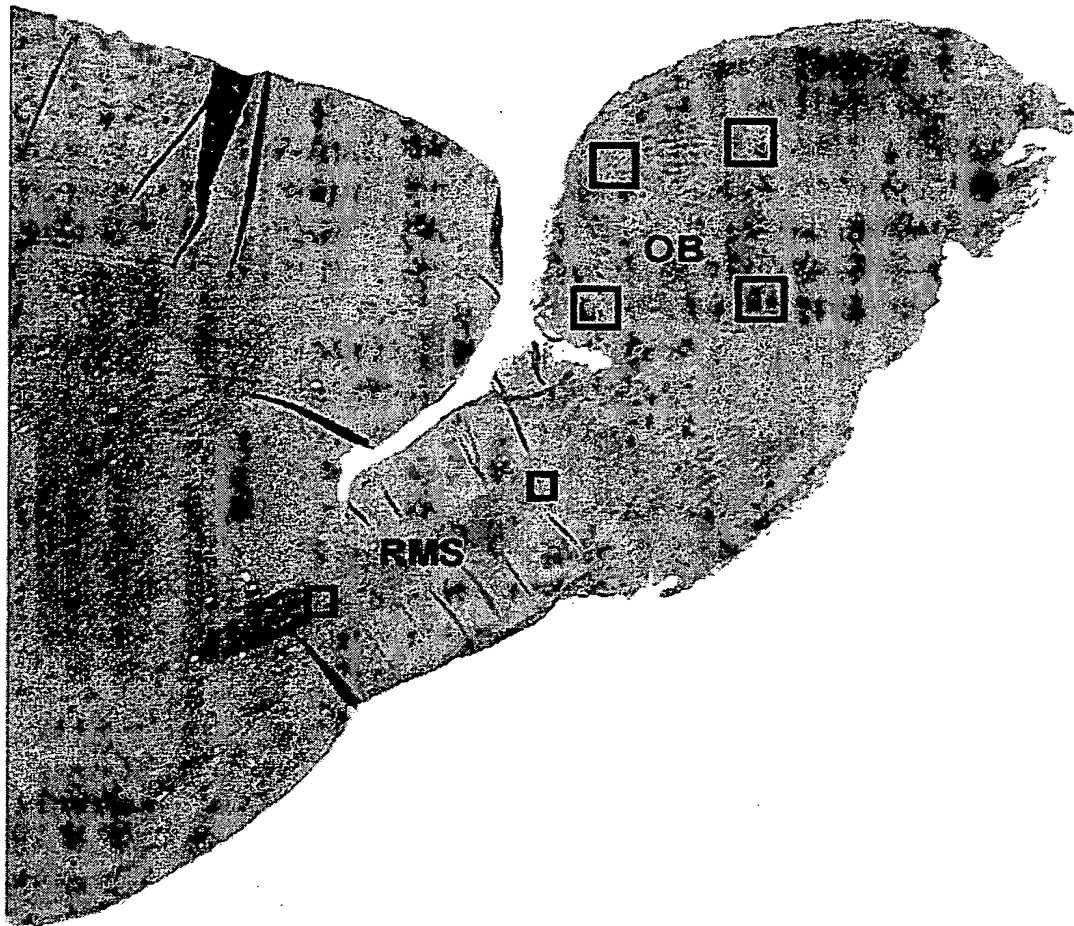
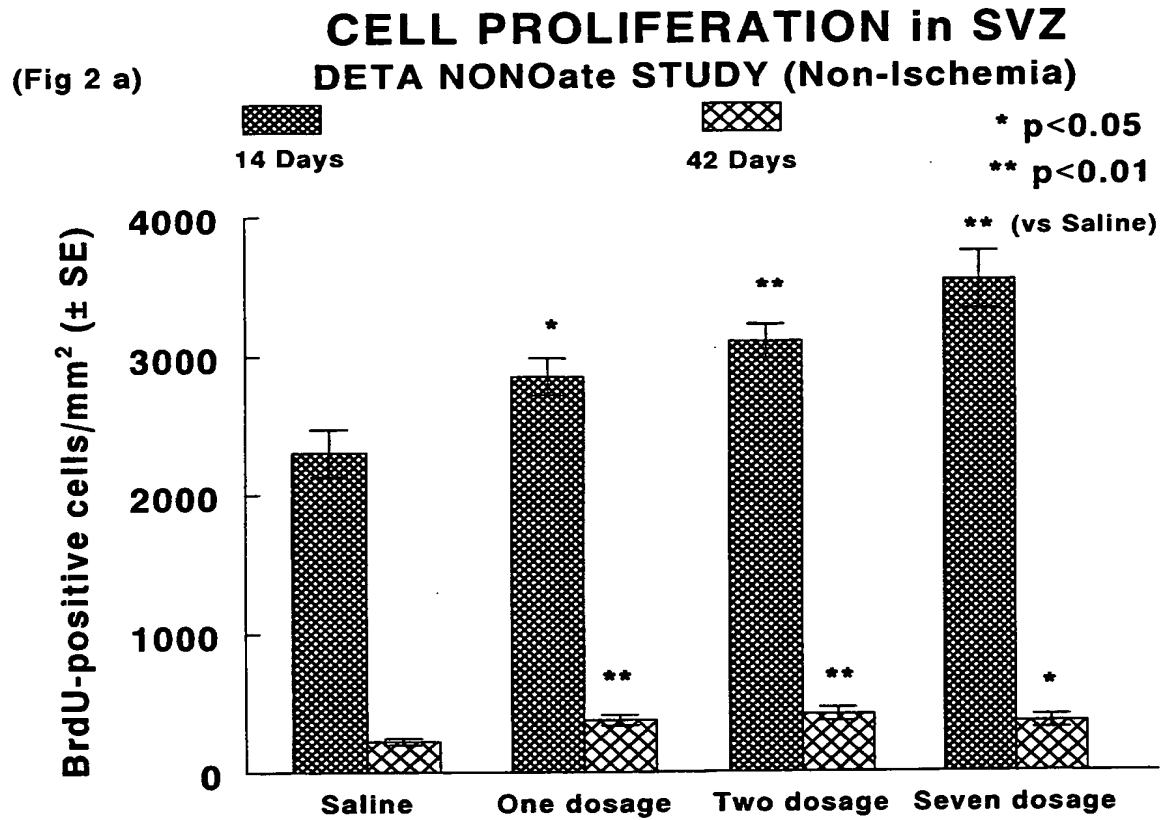
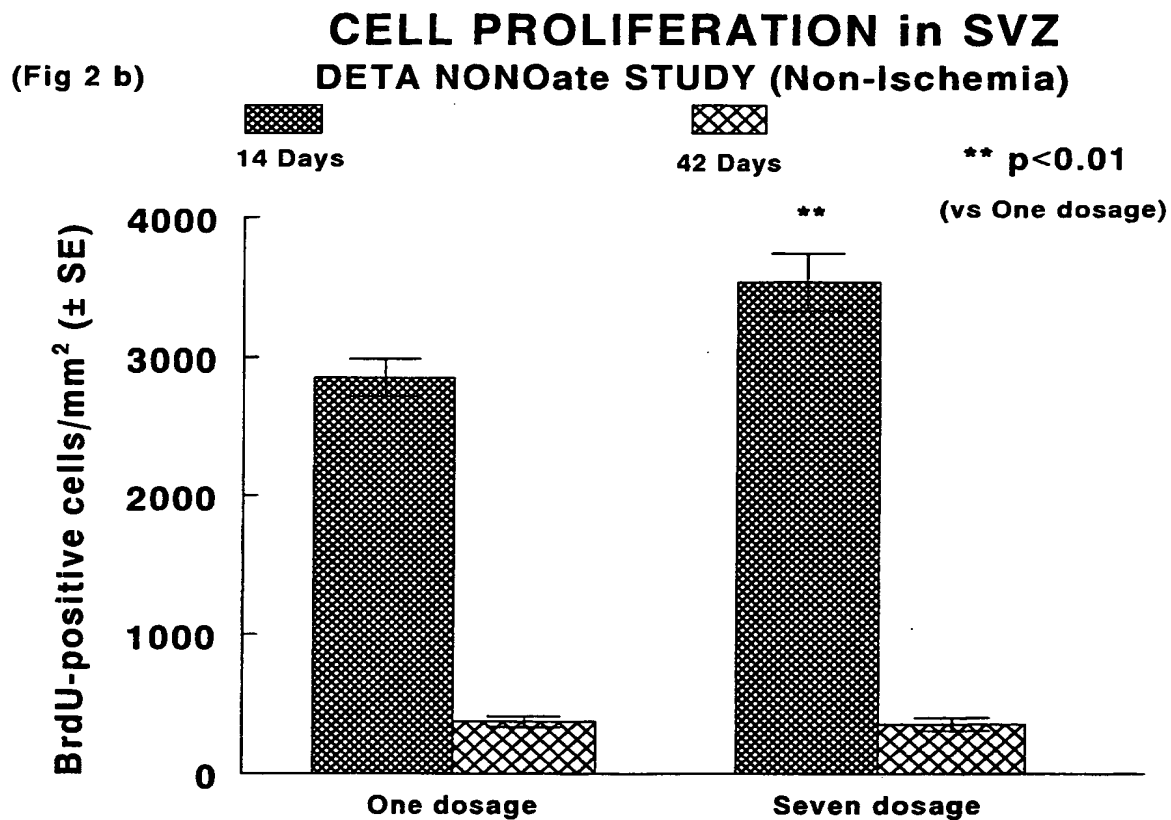
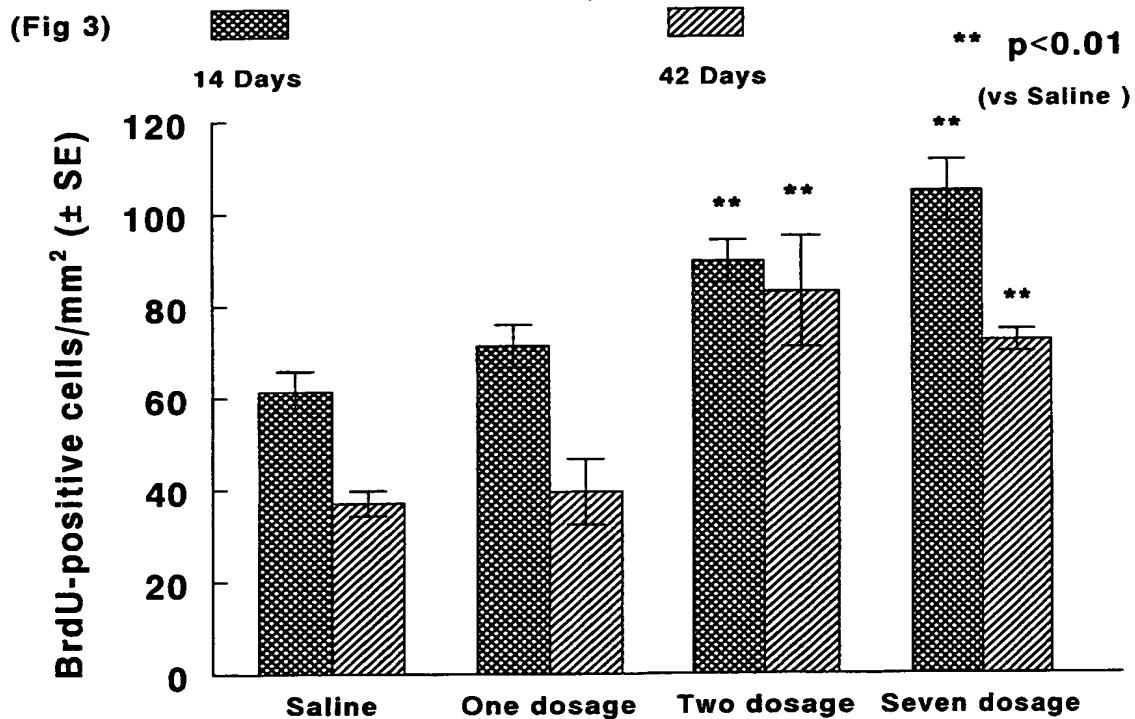


Fig 1.



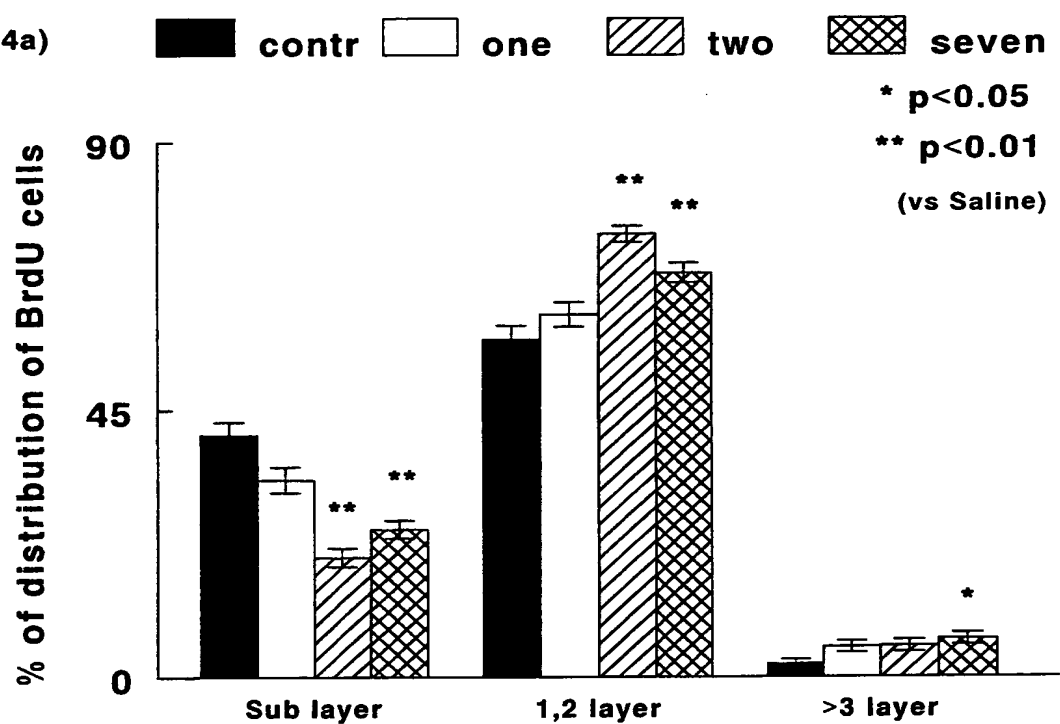


## CELL PROLIFERATION in Dentate Gyrus DETA NONOate STUDY (Non-Ischemia)



## CELL PROLIFERATION in Dentate Gyrus 14 DAYS

(Fig 4a)



**CELL PROLIFERATION in Dentate Gyrus****42 DAYS**

(Fig 4b)

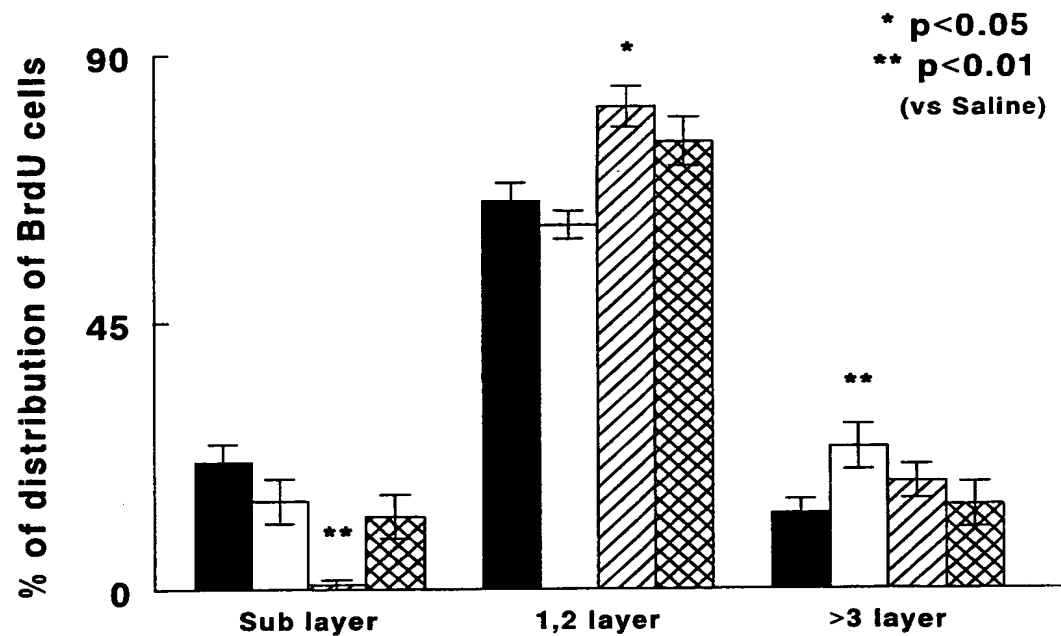
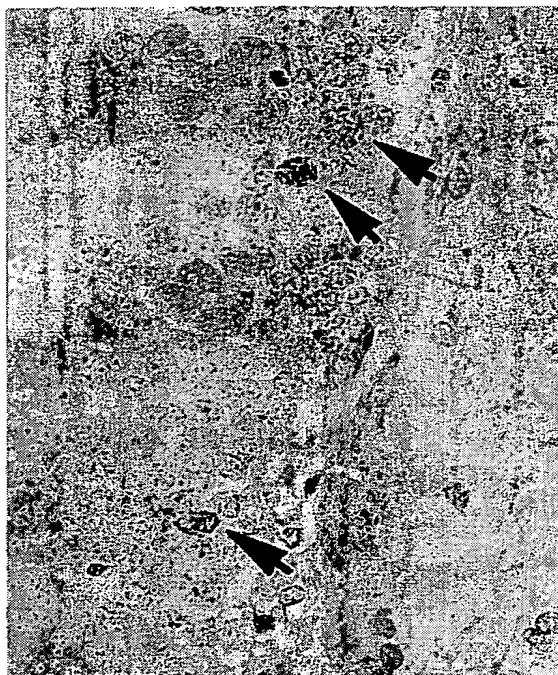
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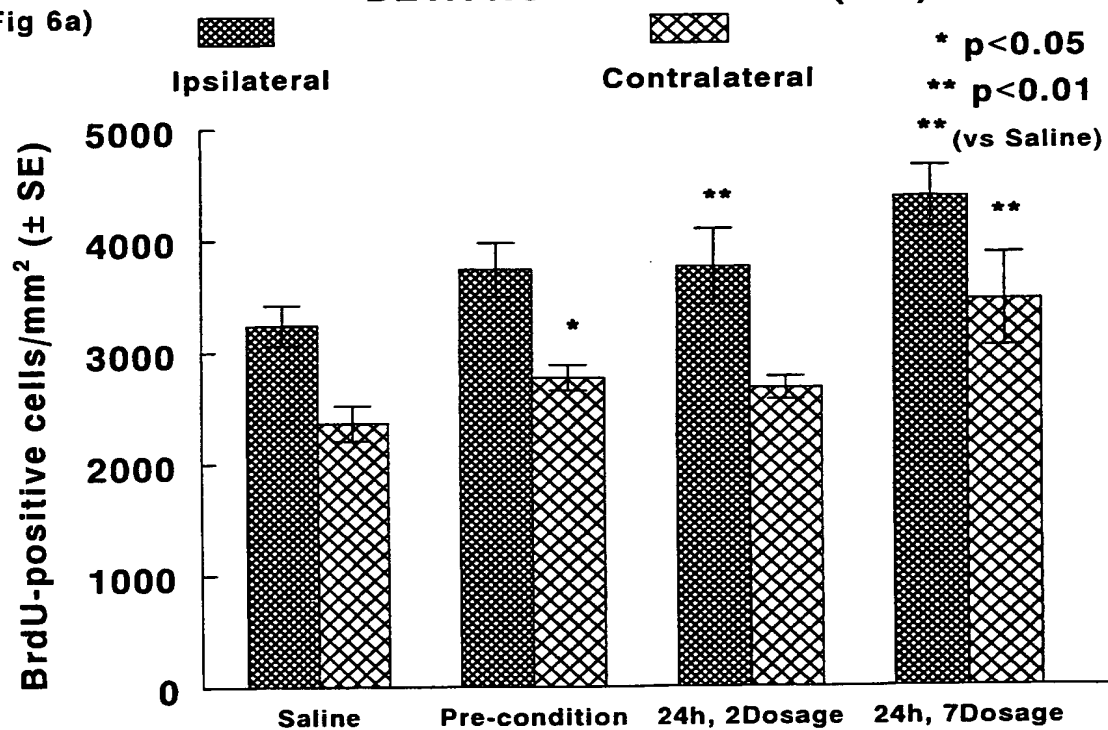


Fig 5

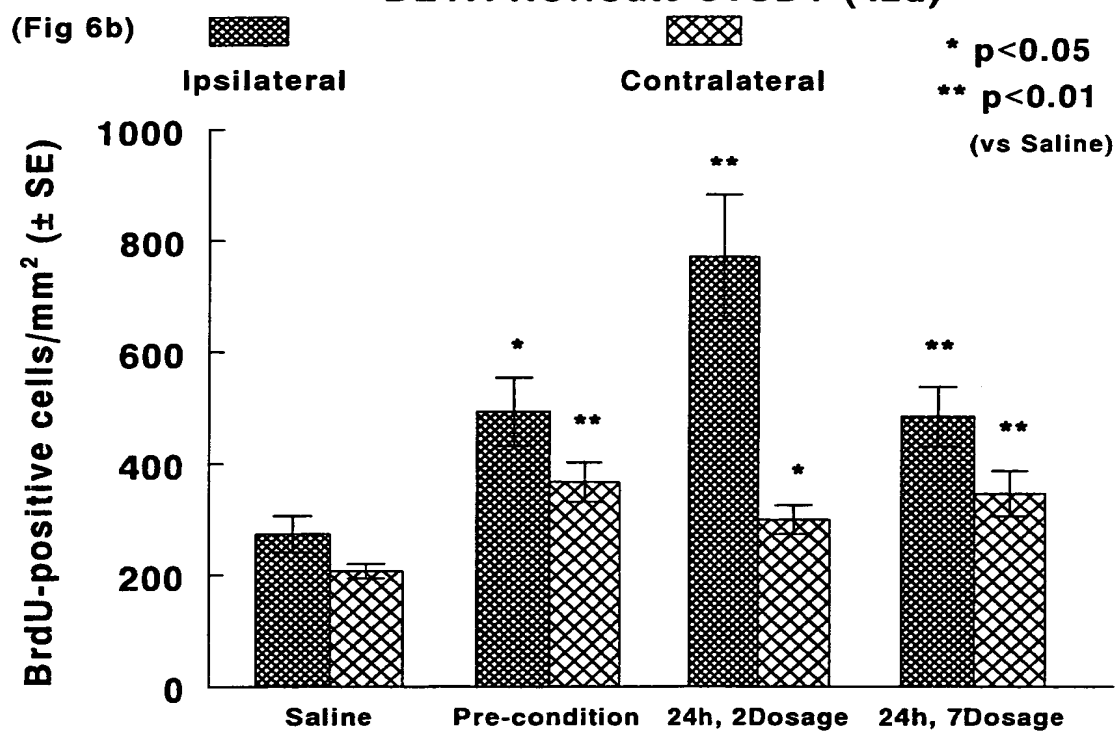


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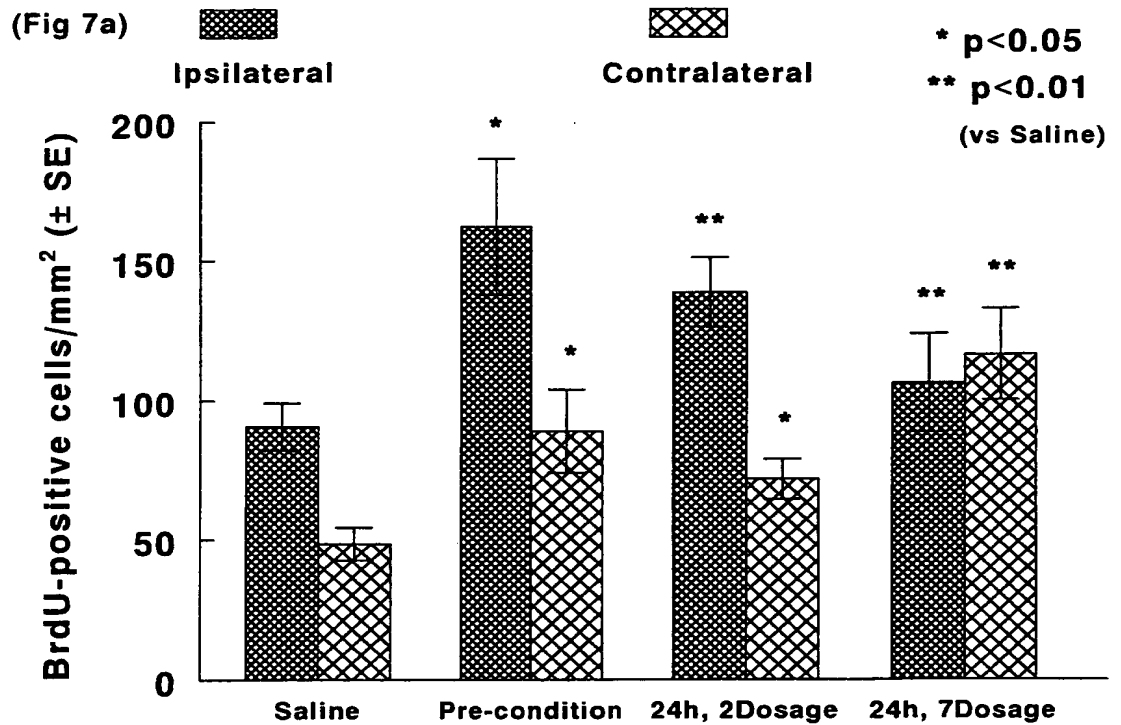
(Fig 6a)



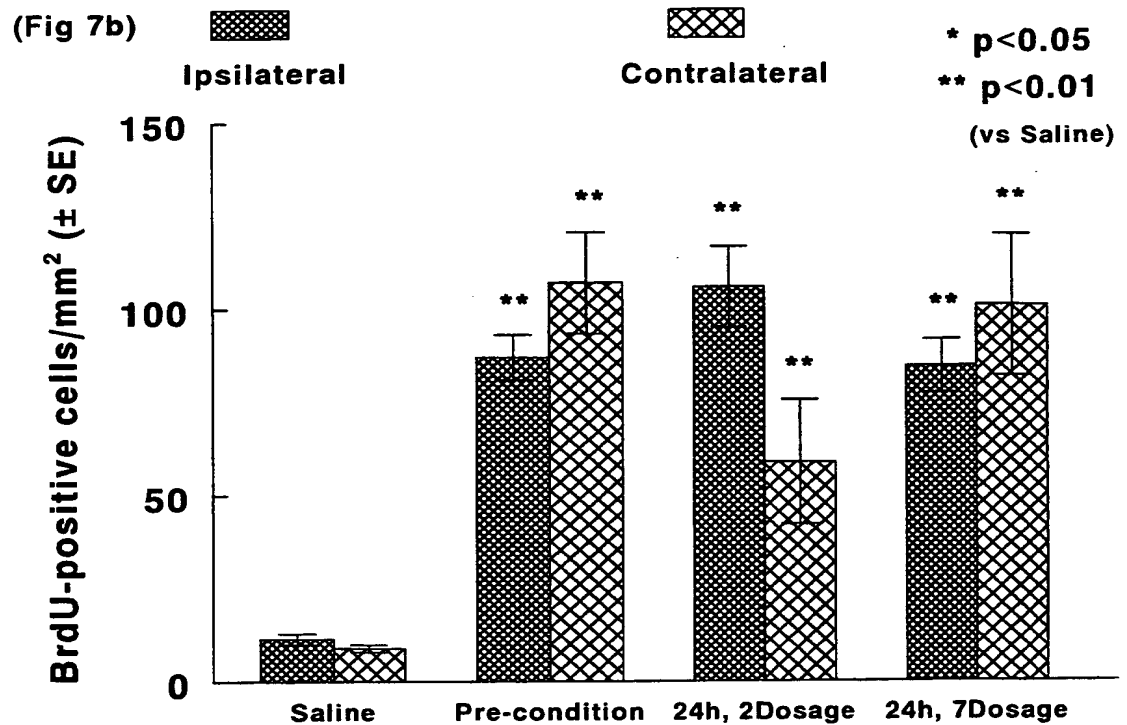
## CELL PROLIFERATION in SVZ DETA NONOate STUDY (42d)



## CELL PROLIFERATION in OB DETA NONOate STUDY (14d)

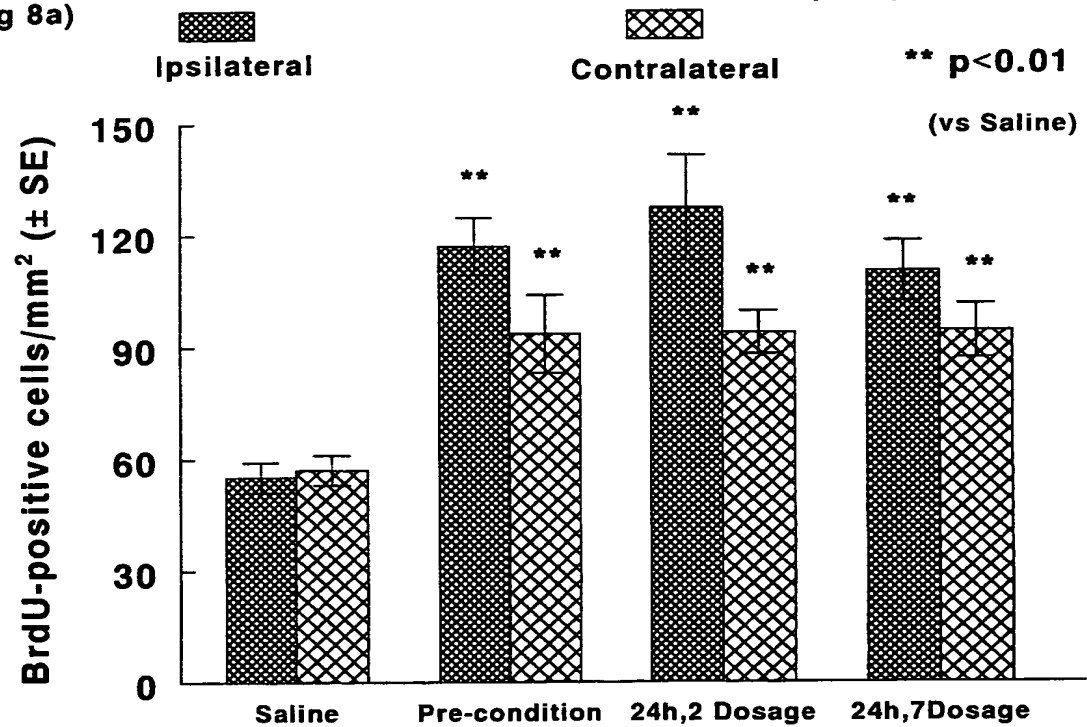


## CELL PROLIFERATION in OB DETA NONOate STUDY (42d)

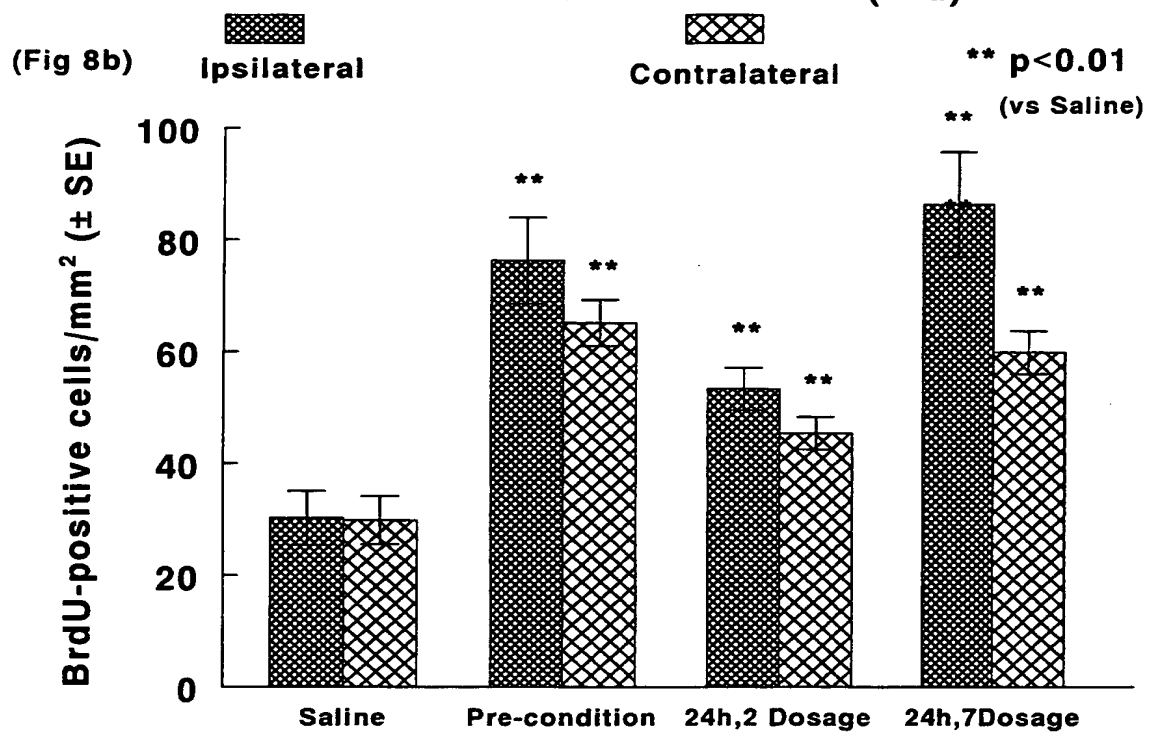


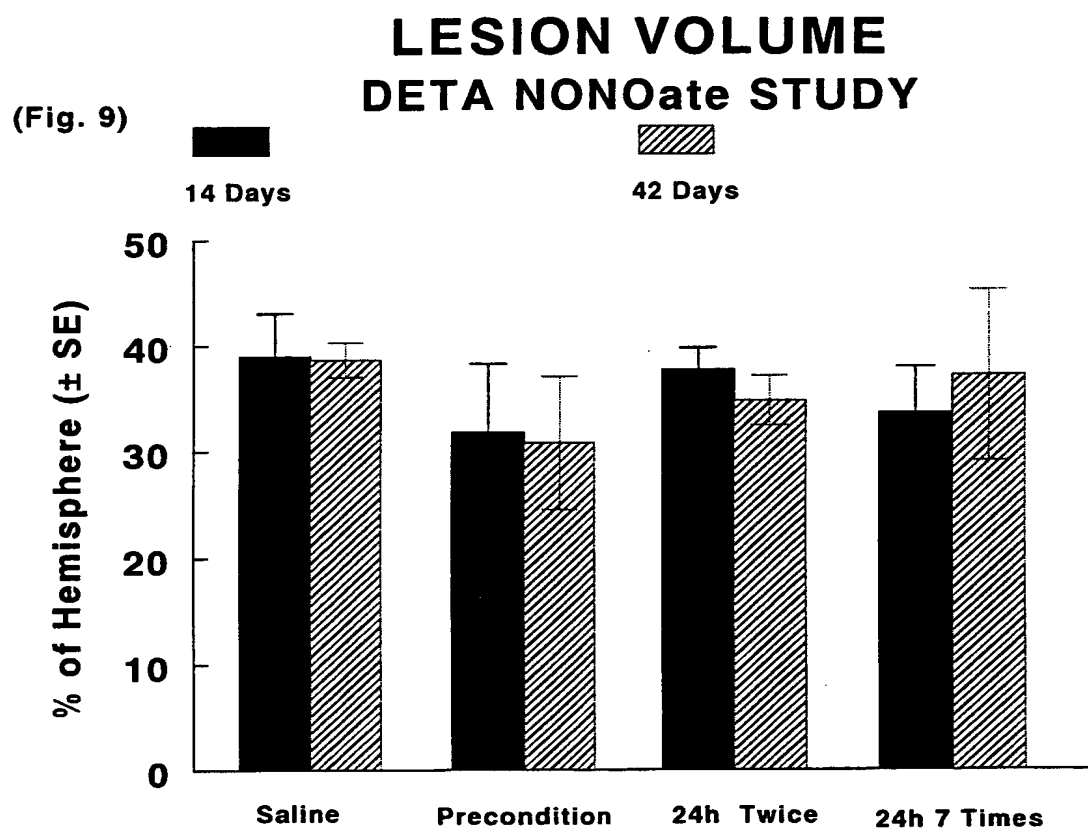
## CELL PROLIFERATION in Dentate Gyrus DETA NONOate STUDY (14d)

(Fig 8a)



## CELL PROLIFERATION in Dentate Gyrus DETA NONOate STUDY (42d)







## Adhesive Removal Test

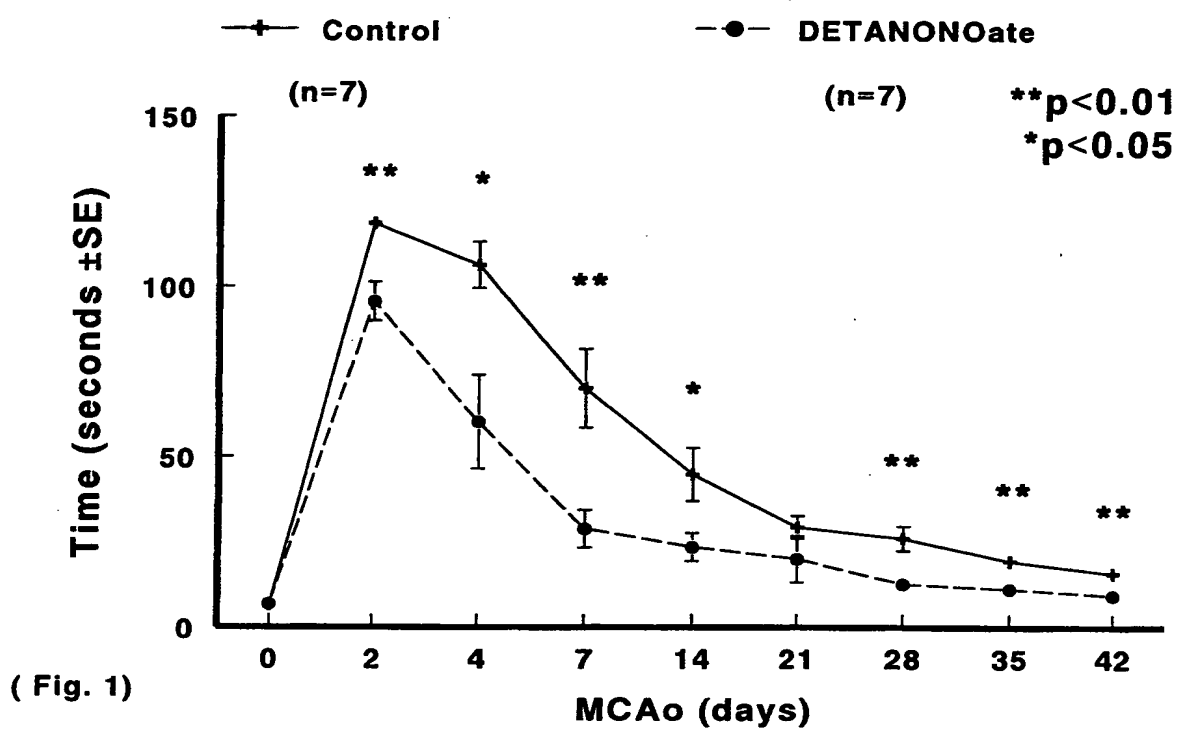


Fig 10

## Rotarod Test

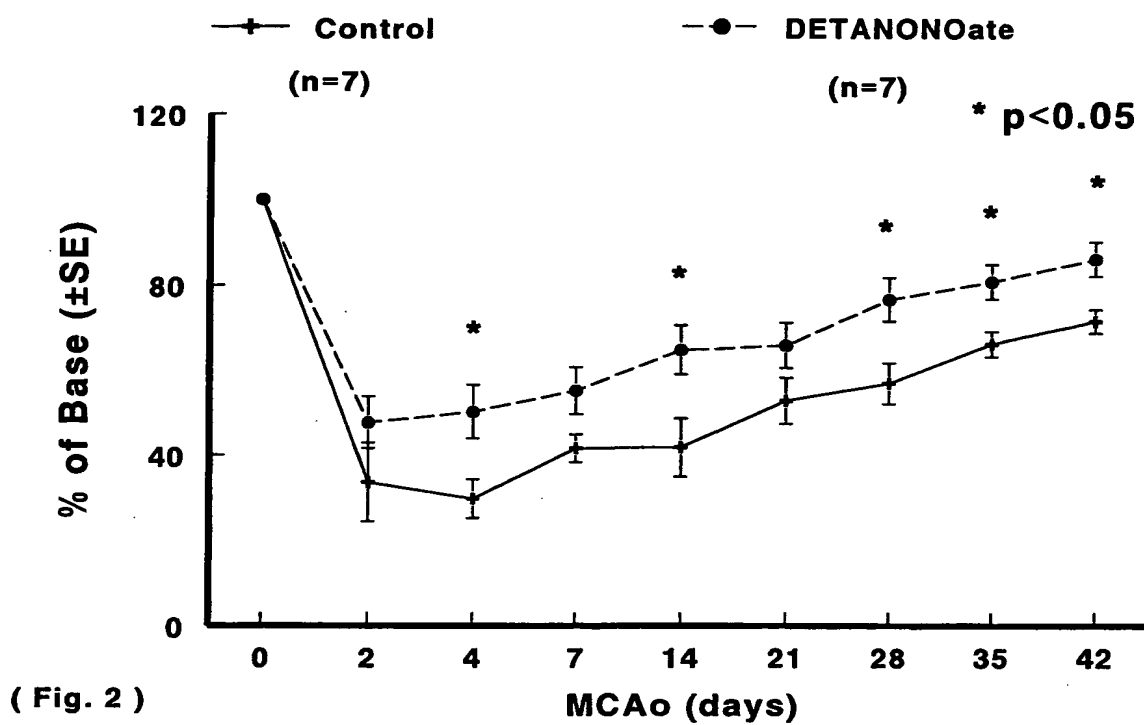


Fig 11

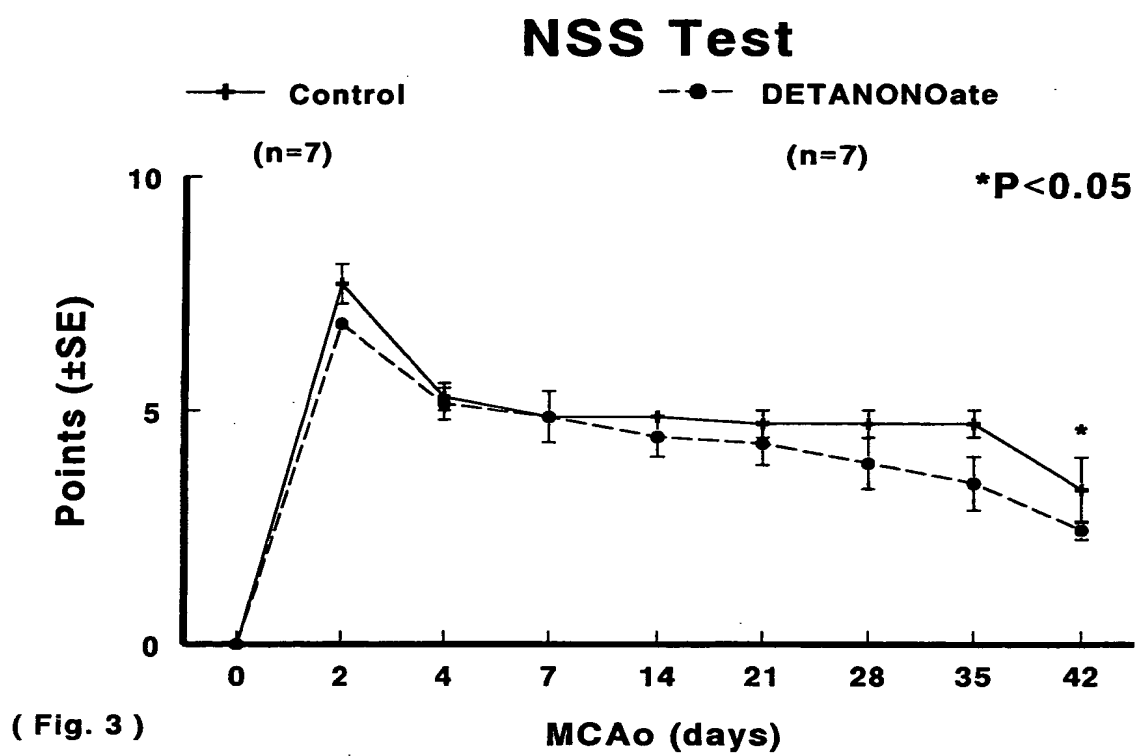
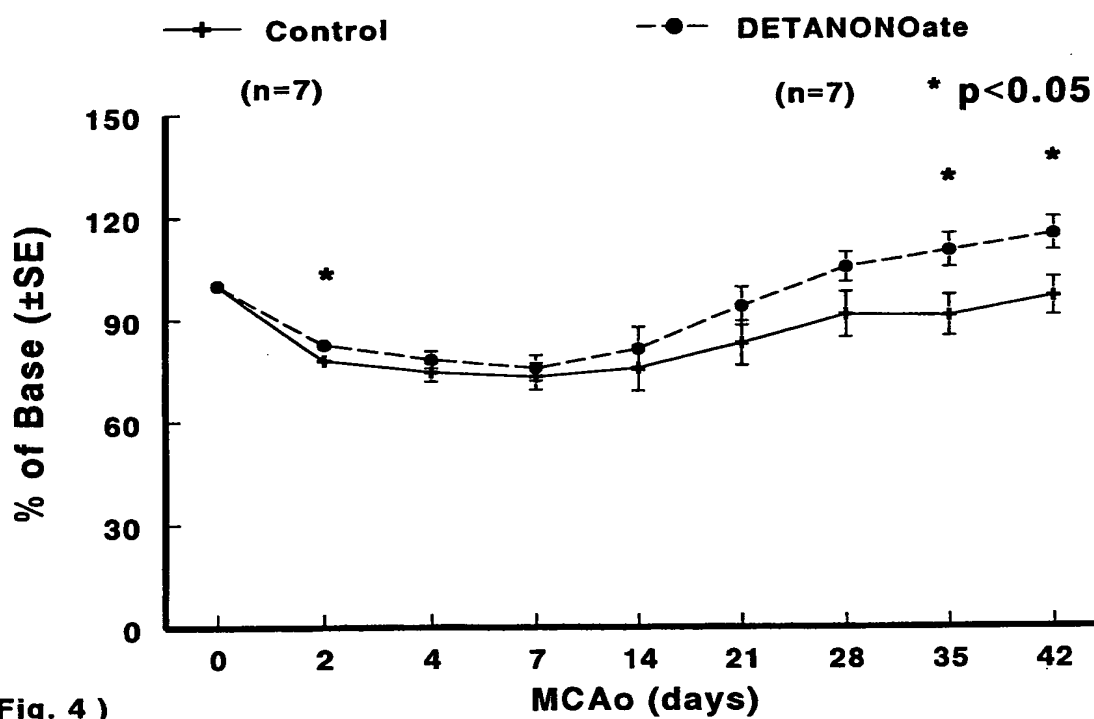


Fig 12

## Weight %



( Fig. 4 )

Fig 13

## Rotarod Test

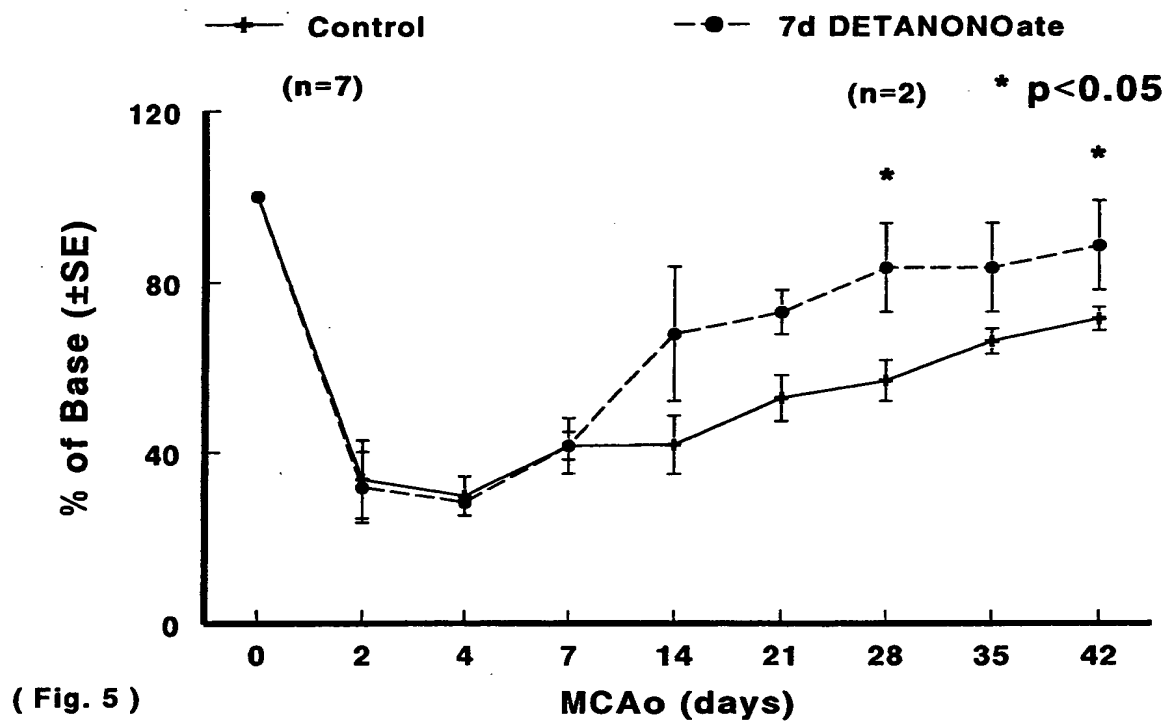


Fig 14

## Rotarod Test

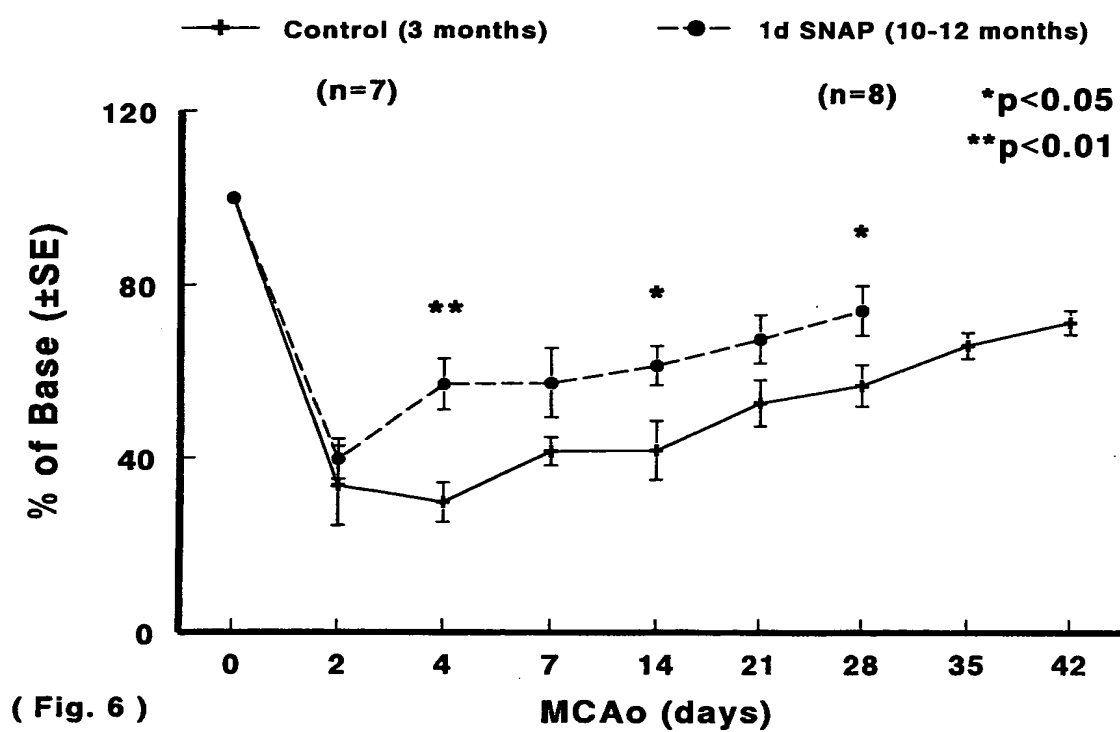
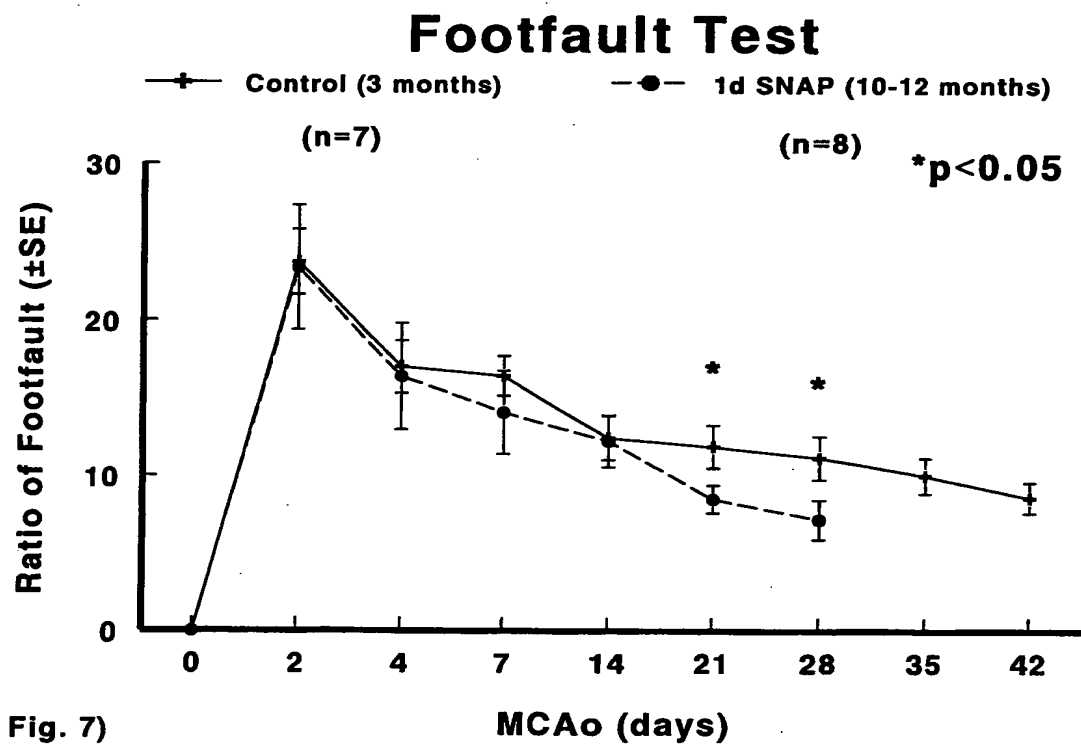


Fig 15



## Adhesive Removal Test

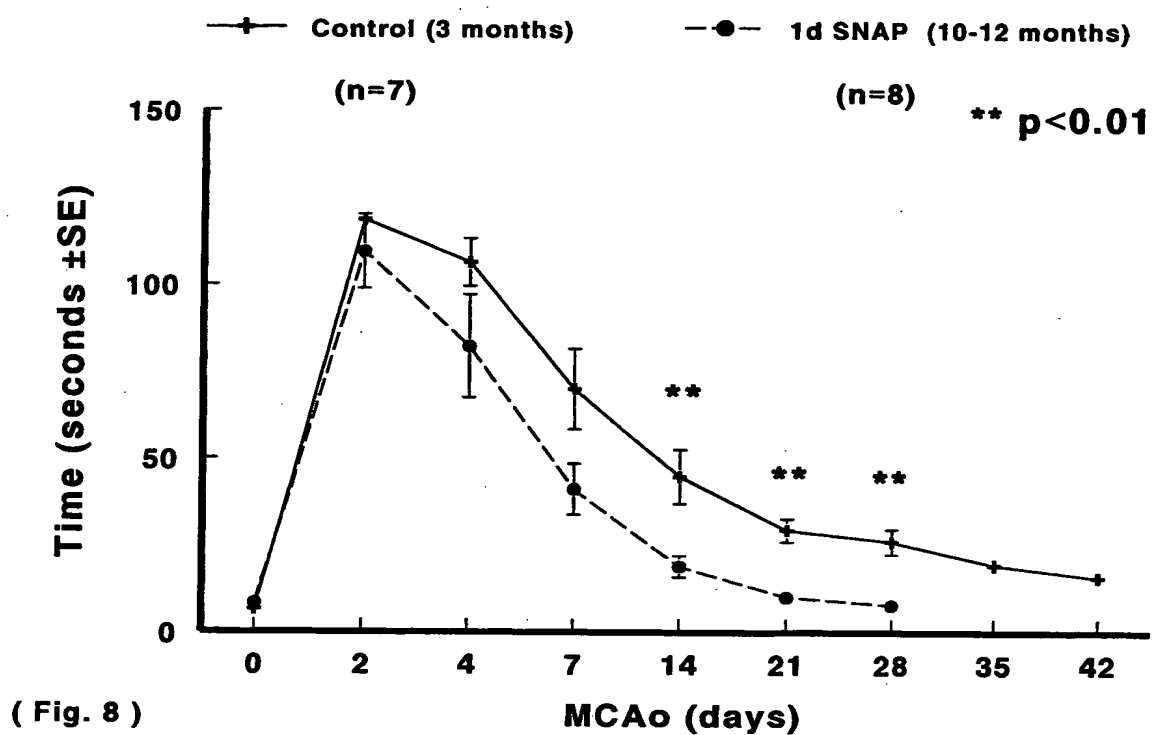


Fig 17